

U.S. Appl. No. 10/552,925

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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 - 58 (Canceled)

59. (Currently Amended) A data isolation system for software and data maintenance, back up and recovery for a computer wherein dynamic data files are identified and passed into a at least one hidden partition on a hard disk of the computer, and the passing is being by one or more of selected from the group consisting of copying and redirection;

wherein the ~~at least one~~ hidden partition and its content is neither manageable nor accessible by a primary operating system of the computer, the computer's operating system; and the dynamic data files in the hidden partition are not accessible by any software application on the computer and work as active data files for a software application on the computer and are continuously updated.

60. (Currently Amended) The system as claimed in claim 59, wherein the passing group ~~further~~ includes filtering and access control.

61. (Previously Presented) The system as claimed in claim 59, wherein automatic back ups are made to the dynamic data files in the hidden partition whenever the dynamic data files are accessed and modified.

62. (Previously Presented) The system as claimed in claim 59, wherein the dynamic data files include the computer's operating environment so that the computer's operating environment can be restored from the dynamic data files in the hidden partition.

63. (Currently Amended) The system as claimed in claim 59, wherein the dynamic data files in the hidden partition include data up to a ~~the~~ time of a failure of the primary operating computer's system.

64. (Currently Amended) The system as claimed in claim 59, wherein compression is used for ~~at least one file of~~ the dynamic data files in the hidden partition.

65. (Currently Amended) The system as claimed in claim 59, wherein encryption is used for ~~at least one of~~ the dynamic data files in the hidden partition.

66. (Currently Amended) The system as claimed in claim 59, wherein:
prior to copying the dynamic data files into the hidden partition, all software installed on the computer, including the ~~a~~ primary operating system ~~for the computer~~, is segregated into at least one static routine and the dynamic data files by categorizing the software installed on the computer;

the files, dynamic data files include ~~including~~ system configuration files ~~files~~, and user data files; ~~the segregation comprising categorization;~~

all data sent from the primary operating system to the dynamic data files and all data sent from the dynamic data files to the primary operating system is passed to the dynamic data files in the hidden partition; and

~~the segregating is by or categorizing of the data files of is by use of a data isolation technique that consists of one or more selected from the group consisting of:~~

- (a) automatic selection of a commonly used software application of the primary operating system;
- (b) automatic selection of a commonly used software application;
- (c) selection of a software application by a user of the computer; and
- (d) selection of files or file folders by the user.

67. (Currently Amended) The system as claimed in claim 59, wherein:

~~the dynamic data files in the hidden partition are continuously updated and the original~~
dynamic data files in a main partition of the hard disk are continuously updated;

an additional I/O driver ~~is being~~ placed between a file system I/O interface and a disk driver for access control, intercepting, filtering and re-directing data for the dynamic data files in the hidden partition, and the additional I/O driver uses a ~~using an~~ secondary operating system of the computer;

the access control, intercepting, filtering and re-directing ~~is by the use of~~ regulatory, matching, and fulfillment tables;

the additional I/O driver is part of one or more of ~~selected from the group consisting of:~~
the disk driver, the file system I/O interface, and the primary operating system;

the secondary operating system is different than ~~to~~ the primary operating system; and

back up and recovery use one of the primary operating system and the secondary operating system.

68. (Currently Amended) The system as claimed in claim 59, wherein on a system recovery, a last back up of a system environment of the computer in the hidden partition, including the ~~copied~~ dynamic data files in the hidden partition, is recovered, ~~recovered~~; the dynamic data files in the hidden partition include ~~including~~ all user data in the computer up to an instant before the system recovery ~~is process was~~ invoked, and the system environment includes ~~including~~ the primary operating system and the software application.

69. (Currently Amended) The system as claimed in claim 59, wherein upon new software being installed in the computer, the installation is delayed until a back up of the computer's operating existing system environment to the dynamic data files in the hidden partition is completed and, after completion of the back up, the installation is resumed ~~resumed~~; and, if system instability or failure is encountered after the installation or running of the new software,

then the computer system restores the computer's previous operating environment from the back up.

70. (Currently Amended) The system as claimed in claim 59, wherein upon a new device driver being installed in the computer, the installation is delayed until a back up of the computer's operating existing system environment to the dynamic data files in the hidden partition is completed and, after completion of the back up, the installation is resumed and, if system instability or failure is encountered after the installation or running of the new device driver, then the computer system restores the computer's previous operating environment from the back up.

71. (Currently Amended) The system as claimed in claim 59, wherein the software application and the its dynamic data files belonging to the software application are copied to the hidden partition as independent modules.

72. (Currently Amended) The system as claimed in claim 59, wherein the dynamic data files in the hidden partition include system configuration files and all user data files in the computerwork as active data files for a software application and are continuously updated.

73. (Currently Amended) The system as claimed in claim 66, wherein:

for (a), (b) and (c), the all dynamic data files belonging to the software application are ~~will be~~ automatically segregated and stored to the hidden partition; and

for (d), the selected files or ~~all~~ the dynamic data files belonging to the selected file folders are ~~will be~~ automatically segregated and stored to the hidden partition.

74. (Previously Presented) The system as claimed in claim 59, wherein the dynamic data files stored in the hidden partition are protected.

75. (Currently Amended) The system as claimed in claim 59, wherein ~~the dynamic data files stored in the hidden partition are used as active working files and are continuously updated; a plurality of back-up copies of the each dynamic data files in the hidden partition are being made in the hidden partition using a first-in-first-out sequence, sequence;~~ and upon accessing and modifying the dynamic data files in the hidden partitionan working data file, the plurality of back-ups are updated according to a pre-assigned back-up schedule.

76. (Currently Amended) A system for managing access to a host computer by a remote computer, wherein;

access by the remote computer is in accordance with a software security access policy in the host computer;

~~wherein~~ dynamic data files are identified and passed into a hidden partition on a hard disk of the host computer, and the passing is being by one or more of selected from the group consisting of copying, redirection, filtering, and access control;

the software security access policy has a file access right and control mechanism that controls access to the host computer by the remote computer; and

the file access right and control mechanism selectively provides protection to a selected software application and its respective dynamic data files and is controlled by the host computer and includes:

- (a) selection of software application/programs;
- (b) selection of dynamic data files of the software application;
- (c) selection of configuration files;
- (d) selection of a data file or folder; and
- (e) selection of a type of an operation to be performed by the remote computer.

77. (Currently amended) The system as claimed in claim 76, wherein the hidden partition and its content is neither manageable nor accessible by an operating system of the remote computer, and the dynamic data files in the hidden partition are not accessible by any software

application on the remote computer and work as active data files for the software application on the remote computer and are continuously updated~~the software security access policy has a file access right and control mechanism; and the file access right and control mechanism is used to selectively provide protection to selected software application and their respective dynamic data files; the file access right and control mechanism of the host computer by the remote computer being controlled by the host computer and include:~~

- ~~(a) — selection of software application/programs;~~
- ~~(b) — selection of dynamic data files of the software application;~~
- ~~(c) — selection of configuration files;~~
- ~~(d) — selection of data file or folder; and~~
- ~~(e) — selection of the type of the operation to be performed by the remote computer.~~

78. (Currently Amended) The system as claimed in claim ~~76~~⁷⁷, wherein the selected data file, or data files belonging to the selected folder, are automatically given the access right while any other data files are ~~others will be denied the access right;~~ the file access right and control mechanism ~~is of the host computer being~~ pre-determined by a category of the remote ~~host~~ computer, and different remote computers are given different access rights for different usage, and usage; all files including program, configuration and user data files on the remote computer are being automatically given the access right while all other files ~~others~~ are denied the access right.

79. (Currently Amended) The system as claimed in claim 78, wherein:

the host computer includes a primary operating system, a secondary operating system, a file system I/O interface, a disk driver and has an additional I/O driver placed between the a-file system I/O interface and the a-disk driver for access control, intercepting, filtering and re-directing data for the dynamic data files; files;

the additional I/O driver uses the ~~using an~~ secondary operating system;

the access control, intercepting, filtering and re-directing ~~being by the use of~~ regulatory, matching, and fulfillment tables; and

the additional I/O driver is part of one or more of selected from the group consisting of: the disk driver, the file system I/O interface, and the primary operating system.

80. (Currently Amended) The system as claimed in claim 79, wherein the secondary operating system is different ~~than to the primary operating system, system;~~ back up and recovery use one of the primary operating system and the secondary operating ~~system, system;~~ and the remote access is through the secondary operating system.

81. (Currently Amended) The system as claimed in claim 76, wherein the selected software application and ~~its their~~ respective dynamic data files are identified and are located in at least one partition of ~~a the~~ primary operating system of the host computer.

82. (Currently Amended) The system as claimed in claim 76, wherein the host computer ~~uses using~~ diagnostic utilities to allow remote technical support by the remote computer.

83. (Currently Amended) A system for providing an external back up for ~~a at least one~~ computer to ~~a at least one~~ hidden partition of a centralized back up server, wherein:

dynamic data files of the ~~at least one~~ computer are identified and passed into the ~~at least one~~ hidden partition on a hard disk of the centralized back up server, and the passing is by ~~being by~~ one or more of selected from the group consisting of copying and redirection;

the hidden partition of the centralized back up server is accessed by the computer using at least one of a LAN, WAN, VPN, Intranet and Internet;

critical software applications and their dynamic data files are stored and protected in the hidden partition of the centralized back up server using encryption and are only able to be accessed by authorized users;

the computer has an additional I/O driver placed between a file system I/O interface and a disk driver for access control, intercepting, filtering and re-directing data for the dynamic data files;

the additional I/O driver uses a secondary operating system of the computer;

the access control, intercepting, filtering and re-directing use regulatory, matching, and fulfillment tables; and

the additional I/O driver is part of one or more of the disk driver, the file system I/O interface, and a primary operating system of the computer.

84. (Currently Amended) The system as claimed in claim 83, wherein the hidden partition and its content is neither manageable nor accessible by the primary operating system, and the dynamic data files in the hidden partition are not accessible by any software application on the computer and work as active data files for a software application on the computer and are continuously updated~~at least one hidden partition of the centralized back-up server is accessed using at least one selected from the group consisting of a: LAN, WAN, VPN, Intranet and Internet; critical applications and their dynamic data files being stored and protected in the at least one hidden partition of the centralized back-up server by using encryption and are only able to be accessed by authorized users.~~

85. (Currently Amended) The system as claimed in claim 84, wherein the dynamic data files include system configuration files and all user data files in the computer~~at least one computer has an additional I/O driver placed between a file system I/O interface and a disk driver for access control, intercepting, filtering and re-directing data for the dynamic data files, the additional I/O driver using a secondary operating system; the access control, intercepting, filtering and re-directing being by the use of regulatory, matching, and fulfillment tables; the additional I/O driver being part of one or more selected from the group consisting of: the disk driver, the file system I/O interface, and the primary operating system.~~

86. (Currently Amended) The system as claimed in 83, wherein the secondary operating system is different than the to a primary operating system, and ~~of the at least one computer;~~ back up and recovery for the computer being by use one of the primary operating system and the secondary operating system.

87. (Currently Amended) The system as claimed in claim 83, 85, wherein communication between the computer and ~~with the~~ centralized back up server is through the secondary operating system.

88. (Currently Amended) The system as claimed in claim 59 further comprising a system for managing access to a host computer by the computer as the computer serves as a remote computer wherein access by the remote computer is in accordance with a software security access policy in the host computer, the computer; ~~wherein~~ dynamic data files are identified and passed into the a hidden partition on a hard disk of the host computer, and the passing includes ~~being by one or more of selected from the group consisting of:~~ copying, redirection, filtering, and access control.

89. (Currently Amended) The system as claimed in claim 59 further comprising a system for providing an external back up for the at least one computer to the at least one hidden partition on a hard disk of a centralized back up server, ~~wherein dynamic data files of the at least one computer are identified and passed into the at least one hidden partition on a hard disk of the centralized back up server, the passing being by one or more selected from the group consisting of: copying and redirection.~~

90. (Currently Amended) The system as claimed in claim 89, wherein the hidden partition of the centralized back up server is accessed by the computer using at least one of a LAN, WAN, VPN, Intranet and Internet ~~for management of access to a host computer by a remote computer as claimed in claim 76 further comprising~~

~~— a system for providing an external back up for at least one computer to at least one hidden partition of a centralized back up server, wherein dynamic data files of the at least one computer are identified and passed into the at least one hidden partition on a hard disk of the centralized back up server, the passing being by one or more selected from the group consisting of: copying and redirection.~~

91. (New) A data isolation system for software and data maintenance, back up and recovery for a computer wherein dynamic data files are identified and passed into a hidden partition on a hard disk of the computer, and the passing is by one or more of copying and redirection, wherein:

- the hidden partition and its content is neither manageable nor accessible by a primary operating system of the computer;

- the dynamic data files in the hidden partition are not accessible by any software application on the computer and are continuously updated;

- original dynamic data files in a main partition of the hard disk are continuously updated;

- an additional I/O driver is placed between a file system I/O interface and a disk driver for access control, intercepting, filtering and re-directing data for the dynamic data files in the hidden partition, and the additional I/O driver uses a secondary operating system of the computer;

- the access control, intercepting, filtering and re-directing use regulatory, matching, and fulfillment tables;

- the additional I/O driver is part of one or more of the disk driver, the file system I/O interface, and the primary operating system;

- the secondary operating system is different than the primary operating system; and

- back up and recovery use one of the primary operating system and the secondary operating system.

92. (New) The system as claimed in claim 91, wherein the primary operating system interacts with a user of the computer, and the secondary operating system is transparent to the user.

93. (New) The system as claimed in claim 92, wherein the back up and recovery use the secondary operating system.

94. (New) A data isolation system for software and data maintenance, back up and recovery for a computer wherein dynamic data files are identified and passed into a hidden partition on a hard disk of the computer, and the passing is by one or more of copying and redirection, wherein:

the hidden partition and its content is neither manageable nor accessible by a primary operating system of the computer;

the dynamic data files in the hidden partition are not accessible by any software application on the computer; and

on a system recovery, a last back up of a system environment of the computer in the hidden partition, including the dynamic data files in the hidden partition, is recovered, the dynamic data files in the hidden partition include all user data in the computer up to an instant before the system recovery is invoked, and the system environment includes the primary operating system and the software application.

95. (New) A data isolation system for software and data maintenance, back up and recovery for a computer wherein dynamic data files are identified and passed into a hidden partition on a hard disk of the computer, and the passing is by one or more of copying and redirection, wherein:

the hidden partition and its content is neither manageable nor accessible by a primary operating system of the computer;

the dynamic data files in the hidden partition are not accessible by any software application on the computer and work as active data files and are continuously updated; and

back-ups of the dynamic data files in the hidden partition are made in the hidden partition using a first-in-first-out sequence, and upon accessing and modifying the dynamic data files in the hidden partition, the back-ups are updated according to a pre-assigned back-up schedule.

96. (New) A computer, comprising:

a primary operating system that interacts with a user of the computer;

a secondary operating system that is different than the primary operating system;

a hard disk that includes a hidden partition; and

a data isolation system that identifies dynamic data files and passes the dynamic data files to the hidden partition, wherein the dynamic data files include system configuration files and user data files, the passing includes one or more of copying and redirection, the hidden partition and its content cannot be managed and cannot be accessed by the primary operating system, the user and any software application on the computer, and the hidden partition and its content is managed and accessed by the secondary operating system for software and data maintenance, back up and recovery for the computer.

97. (New) The system as claimed in claim 96, wherein the primary operating system is a Windows operating system and the secondary operating system is a Linux operating system.

98. (New) The system as claimed in claim 96, wherein the secondary operating system is transparent to the user.

99. (New) The system as claimed in claim 96, wherein the secondary operating system is placed between the primary operating system and the dynamic data files in the hidden partition.

100. (New) The system as claimed in claim 99, wherein the secondary operating system passes all user data in the computer from the primary operating system to the dynamic data files in the hidden partition.

101. (New) The system as claimed in claim 99, wherein the primary operating system includes a file system I/O interface, a disk driver and an additional I/O driver, and the additional I/O driver is placed between the file system I/O interface and the disk driver and transfers data to and from the dynamic data files in the hidden partition using the secondary operating system.

102. (New) The system as claimed in claim 101, wherein the additional I/O driver provides access control, intercepting, filtering and re-directing of the data for the dynamic data files in the hidden partition using the secondary operating system.

103. (New) The system as claimed in claim 102, wherein the additional I/O driver provides the access control, intercepting, filtering and re-directing of the data for the dynamic data files in the hidden partition using regulatory, matching, and fulfillment tables.

104. (New) The system as claimed in claim 96, wherein the dynamic data files in the hidden partition work as active data files for a software application on the computer and are continuously updated whenever the dynamic data files are accessed and modified.

105. (New) The system as claimed in claim 96, wherein the dynamic data files in the hidden partition are automatically backed up in a circular first-in-first-out sequence in the hidden partition whenever the dynamic data files are accessed and modified.

106. (New) A computer, comprising:
a primary operating system that interacts with a user of the computer;

a secondary operating system that is different than the primary operating system and is transparent to the user;

a hard disk that includes a hidden partition; and

a data isolation system that identifies dynamic data files and passes the dynamic data files to the hidden partition, wherein the dynamic data files include the computer's operating environment and user data files, the passing includes one or more of copying and redirection, the hidden partition and its content cannot be managed and cannot be accessed by the primary operating system, the user and any software application on the computer, the hidden partition and its content is managed and accessed by the secondary operating system for software and data maintenance, back up and recovery for the computer, and the secondary operating system is placed between the primary operating system and the dynamic data files in the hidden partition and passes all user data in the computer from the primary operating system to the dynamic data files in the hidden partition.

107. (New) The system as claimed in claim 106, wherein the primary operating system is a Windows operating system and the secondary operating system is a Linux operating system.

108. (New) The system as claimed in claim 106, wherein the primary operating system includes a file system I/O interface, a disk driver and an additional I/O driver, the additional I/O driver is placed between the file system I/O interface and the disk driver and transfers data to and from the dynamic data files in the hidden partition using the secondary operating system, and the additional I/O driver provides access control, intercepting, filtering and re-directing of the data for the dynamic data files in the hidden partition using the secondary operating system and regulatory, matching, and fulfillment tables.

109. (New) The system as claimed in claim 106, wherein the dynamic data files in the hidden partition work as active data files for a software application on the computer and are continuously updated whenever the dynamic data files are accessed and modified.

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110. (New) The system as claimed in claim 106, wherein the dynamic data files in the hidden partition are automatically backed up in a circular first-in-first-out sequence in the hidden partition whenever the dynamic data files are accessed and modified.